

Date: Sun, 13 Mar 94 04:30:32 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V94 #59
To: Ham-Homebrew

Ham-Homebrew Digest Sun, 13 Mar 94 Volume 94 : Issue 59

Today's Topics:

 Best cars for mobile HF/VHF??
Classified Ads (was Re: For sale: 1300 nm (IR) laser diodes)
 Duplexer design info?
Looking for plans/kits..VHF CW/SSB QRP
 Ramsey SA-7 broadband preamp
 Two Unknown Chips

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 12 Mar 1994 15:36:12 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!news.umbc.edu!
haven.umd.edu!cville-srv.wam.umd.edu!adam@network.ucsd.edu
Subject: Best cars for mobile HF/VHF??
To: ham-homebrew@ucsd.edu

In article <1994Mar11.135613.16379@ke4zv.atl.ga.us>,
Gary Coffman <gary@ke4zv.atl.ga.us> wrote:
>Look at what the cops are driving.

Good idea, Gary. Just don't forget to leave off the whitewalls!

-N3NKI

Date: 12 Mar 1994 20:17:59 GMT

From: ihnp4.ucsd.edu!swrinde!elroy.jpl.nasa.gov!ncar!hsdndev!
dartvax.dartmouth.edu!usenet@network.ucsd.edu
Subject: Classified Ads (was Re: For sale: 1300 nm (IR) laser diodes)
To: ham-homebrew@ucsd.edu

Since I seem to be seeing a rash of classified ads in this newsgroup lately, I think it's time to point out that for sale/wanted posts belong in rec.radio.swap and rec.radio.swap _only_. Please refrain from posting classified ads here.

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=====
Kenneth E. Harker  N1PVB      Dartmouth College  Amateur Packet Radio
kenneth.e.harker@dartmouth.edu  Hinman Box 1262    n1pvb@w1et.nh.usa.na
(603) 643-6549      Hanover, NH 03755  or n1pvb-5 on 144.99
=====
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(PGP Public Key now available on request)

Date: 12 Mar 94 23:23:53 GMT
From: news-mail-gateway@ucsd.edu
Subject: Duplexer design info?
To: ham-homebrew@ucsd.edu

In browsing various publications, appears modern VHF/UHF duplexer design is a product of the black art. I'm in the process of cutting down an old DB Products band-pass 2M duplexer for 220 MHz. This duplexer has coupling loops in each cavity. My references don't discuss whether there is an optimum coupling loop shape factor Vs frequency. Nor is anything mentioned whether the lengths of the cavity coaxial connecting lengths are critical. One commercial reference cautions field technicians from modifying the coaxial harness, stating to do so will cause deterioration of duplexer performance.

Whilst the cavities are apart, it would be nice to modify them for band-reject operation as well. Again, my references are silent on this topic.

Anyone on the net willing to share their practical experience/guidance about duplexer design?

73 de Jack

Date: 12 Mar 1994 22:30:34 GMT
From: ihnp4.ucsd.edu!sdd.hp.com!col.hp.com!gag.com!bdale@network.ucsd.edu
Subject: Looking for plans/kits..VHF CW/SSB QRP

To: ham-homebrew@ucsd.edu

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: Look at the two part feature in recent QSTs describing Rick Campbell's
: SSB rig. It will work on any frequency up to 70 cm.

I sent an SASE asking for more info to the supplied address a couple of months ago, but have heard nothing back... was I unlucky? Time to try again, I suppose.

73 - Bdale, N3EUA

Date: 13 Mar 1994 00:38:15 GMT
From: ihnp4.ucsd.edu!agate!usenet.ins.cwru.edu!cleveland.Freenet.Edu!
at017@network.ucsd.edu
Subject: Ramsey SA-7 broadband preamp
To: ham-homebrew@ucsd.edu

In a previous article, eb795@cleveland.Freenet.Edu (Eric Matthews) says:

>
>Hello.
>
>I would like to know if any of you here on r.r.a.h have assembled
> and used the Ramsey SA-7 preamp.
>I am planning to get a few of them and use them for TV and FM DX.
>I will have one for FM, one for UHF, and one for VHF.
>I have three seperate antennas for those bands, and seperate feed
>lines too.
>
>Will it be difficult to design a filter system where only the de
>esired band(ie FM, or UHF TV) get amped by the SA-7?
>
>I plan on buying three of them, and I would like to know what I
>am getting into before I plunk down the \$\$\$.
>
>By the way, here are some specs:
>
>freq range:100kHz to 1000mHz
>gain:>20dB
>noise figure: < 4dB
>NEC microwave transistors are used in the design.
>They are \$14.95 each in kit form from Ramsey.
>Ramsey is at: (716)924-4560
>
>

>
>Thanks.
>--
>Eric Matthews
>eb795@cleveland.freenet.edu
>

I used one for my 6 meter rig and it works. According the the instructions you can tune it for a desired frequency by adding a tuned circuit before and after the preamp....

--
Ronald Wolenski at017@cleveland.freenet.edu
N8WCR
Parma, Ohio

Date: 13 Mar 94 05:48:10 GMT
From: news-mail-gateway@ucsd.edu
Subject: Two Unknown Chips
To: ham-homebrew@ucsd.edu

Hi,

I'd like to get a little info on two chips I've run across. One is an NEC B571C, 8 pin DIP (so I know it's not the Signetics compandor). I think it's a prescaler for a PLL. The other is a (Plessey?) PSSR SL560C, 8 pin DIP, which may be an IF amp. I'm hoping to get enough of a description of these to decide if they might be fun to play with. Thanks for any info.

73,
Mike, KK6GM

Date: 12 Mar 1994 22:27:29 GMT
From: ihnp4.ucsd.edu!sdd.hp.com!col.hp.com!gag.com!bdale@network.ucsd.edu
To: ham-homebrew@ucsd.edu

References <2lh20r\$auf@bigfoot.wustl.edu>, <CMEnED.G1M@hpcvsnz.cv.hp.com>, <1994Mar11.185311.15115@nntpd2.cxo.dec.com>
Subject : Re: GPS Receiver Boards

bonomo@specxn.enet.dec.com wrote:

: I've sent for the specs from Motorola...

: If the product is up to snuff...

I've worked with, or have friends who have worked with, the Rockwell, Trimble, and Motorola receiver cores. Consensus is that the Motorola core is the best for time-transfer applications. The Trimble has a well-defined but annoying jitter to the 1pps signal, the Rockwell gives a 1pps signal that is precise and fairly stable but not aligned with the edge of a second, complicating host software.

All give good results for position and velocity applications. If you want to fly them on weather balloons and such, the Motorola behaves best, holding the last valid position when you hit the COCOM restriction height, the Trimble resets to their corporate offices in CA, reportedly. I don't know anyone who has flown a Rockwell in this application.

The Rockwell has a GaAs frontend so can work well with non-amplified patch antennas over short coax runs. The Trimble and Motorola units benefit from an amplified patch or better antenna.

In summary, if ya gotta do a group purchase, go with the Mot units, and if the price is good, I know a dozen or so folks (working on the AMSAT P3D GPS project) who are likely to be interested in buying one to play with.

73 - Bdale, N3EUA

Date: 13 Mar 1994 00:12:27 GMT

From: ihnp4.ucsd.edu!swrinde!elroy.jpl.nasa.gov!nntp-server.caltech.edu!
palmer@network.ucsd.edu

To: ham-homebrew@ucsd.edu

References <CMEnED.G1M@hpcvsnz.cv.hp.com>,

<1994Mar11.185311.15115@nntpd2.cxo.dec.com>, <2ltfkh\$31f@winfree.gag.com>

Subject : Re: GPS Receiver Boards

bdale@gag.com (Bdale Garbee) writes:

>All give good results for position and velocity applications. If you want to
>fly them on weather balloons and such, the Motorola behaves best, holding the
>last valid position when you hit the COCOM restriction height, the Trimble
>resets to their corporate offices in CA, reportedly. I don't know anyone who
>has flown a Rockwell in this application.

Apparently the restriction is only required when you exceed certain altitude AND speed limit simultaneously. Our group has successfully used GPS (the Rockwell card, I am ~90% sure) on scientific balloons (~125,000 feet, but typically much less than a hundred miles per hour).

We were warned that early versions of the board we used would not work, because it unnecessarily restricted at either a certain altitude OR speed limit.

Contact the companies for futher details.

--

David M. Palmer palmer@alumni.caltech.edu

palmer@tgrs.gsfc.nasa.gov

Clipper: Privacy for people who have nothing to hide.

End of Ham-Homebrew Digest V94 #59
